



Arizona Department of Education

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## CTE FACTS

**CTE FACTS** is published monthly during the school year and highlights informative educational statistics related to Career and Technical Education (CTE) and its programs.

In this issue, we will continue to highlight facts and figures found through research that demonstrates the value of CTE. The information is primarily provided by, and permission granted from, the Association for Career and Technical Education.

## PROVEN EFFECTIVENESS OF CTE

### CTE Students Experience Increases in Earnings and Improved Employment Outcomes:

- ▶ A 2002 study conducted by the Federal Reserve Bank of Chicago<sup>1</sup> found that a year of technically oriented coursework at a community college increased the earnings of men by 14% and women by 29%. Additionally, the study found almost no earnings increase for non-technically oriented coursework.
- ▶ CTE graduates are 10-15% more likely to be in the labor force, and earn 8-9% more than graduates of academic programs, according to a 2001 Russell Sage Foundation study.<sup>2</sup>
- ▶ Seven years after graduating from high school, CTE students had earnings that increased by about 2% for each additional high school CTE course they took, according to the 2004 National Assessment of Vocational Education (NAVE) Final Report.<sup>3</sup>
- ▶ The 2004 NAVE Independent Advisory Panel Report indicated that students who took four high school CTE courses showed an average increase in earnings of \$1,200 immediately after graduation and \$1,800 seven years later.<sup>4</sup>

**CTE Vision: Ensure a dynamic workforce by fully developing every student's career and academic potential.**

**CTE Mission: Prepare Arizona students for workplace success and continuous learning.**

<sup>1</sup> Jacobson, L. et al. "Estimating the Returns to Community College Schooling for Displaced Workers." *Federal Reserve Bank of Chicago*, 2002. (as cited in National Association of State Directors of Career and Technical Education Consortium "Indicators of Success: CTE and Research")

<sup>2</sup> Rosenbaum, J.E. *Beyond College for All*. New York: Russell Sage Foundation, 2001. (as cited in Stone, J. *Career and Technical Education and Student Engagement, Achievement, Transition, and Labor Market Outcomes DRAFT*)

<sup>3</sup> *National Assessment of Vocational Education: Final Report to Congress*, p.110.

<sup>4</sup> NAVE Independent Advisory Panel, p.2.

- ▶ The 2004 NAVE Final Report found that postsecondary CTE education proved an effective means to higher income, as, even without attaining a credential, a single year of study brought 5 to 8% more earnings to postsecondary CTE students than to high school graduates with similar characteristics.<sup>5</sup>
- ▶ Secondary students who graduate with a career and technical education concentration are 2 1/2 times more likely to be employed while pursuing postsecondary education than are “college prep” students, according to the Southern Regional Education Board (SREB).<sup>6</sup>

### **CTE Students Achieve Postsecondary Success:**

- ▶ CTE students enter postsecondary education at approximately the same rate as all high school graduates, notes a study by the Center on Education Policy and American Youth Policy Forum in 2000.<sup>7</sup>
- ▶ The National Center for Education Statistics (NCES) in 2000<sup>8</sup> found that CTE concentrators (earning at least three credits in a single CTE program) were more likely than their general peers to obtain a degree or certificate within 2 years, despite the fact that CTE concentrators were more likely to be employed while in school.
- ▶ A 2000 NCES study<sup>9</sup> found that 71.2% of all sub-baccalaureate students (those enrolled in two-year or shorter postsecondary programs) have CTE majors. NCES’ study also indicated that 66.2% of all degree-seeking undergraduates pursue career majors, 37.6% being vocational (non-baccalaureate) and 28.6% baccalaureate.
- ▶ The 2004 NAVE Final Report<sup>10</sup> states that CTE student college attendance increased by nearly 32 percent between 1982 and 1992.

### **FAST FACTS...**

- According to a 2004 report published by the Brookings Institute, more than half of the buildings that will exist in 2035 have not been built yet.<sup>11</sup>
- Construction is among the economy’s top 10 largest sources of job growth. By 2012, there will be a shortage of 1.1 million skilled trade workers.<sup>12</sup>

<sup>5</sup> *National Assessment of Vocational Education: Final Report to Congress*, p.165.

<sup>6</sup> Boesel, D., Hudson, L., Deich, S., and Masten, C. *National Assessment of Vocational Education Final Report to Congress, Volume II, Chapter Six, “Employment Outcomes.”* Washington, DC: US Department of Education, Office of Educational Research and Improvement, 1994. (as cited in Southern Regional Education Board. “Facts About High School Career/Technical Studies”)

<sup>7</sup> Kober, N., and Rentner, D. *Do You Know the Good News About American Education?* Washington, DC: Center on Education Policy and American Youth Policy Forum, 2000. <[www.aypf.org/whatsnew.htm](http://www.aypf.org/whatsnew.htm)> (as cited in Wonacott, M. *Myths and Realities No. 8*. Educational Resources Information Center, 2000)

<sup>8</sup> Levesque, K. et al. *Vocational Education in the United States*. National Center for Education Statistics, 2000. (as cited in National Association of State Directors of Career and Technical Education Consortium “Indicators of Success: CTE and Research”)

<sup>9</sup> U.S. Department of Education, National Center for Education Statistics. *1999-2000 National Postsecondary Student Aid Study (NPSAS: 2000)*. (as cited in National Center for Education Statistics. *Issue Brief: Undergraduate Enrollments in Academic, Career, and Vocational Education*. Feb 2004)

<sup>10</sup> *National Assessment of Vocational Education: Final Report to Congress*, p. 105.

<sup>11</sup> Don Whyte, “Building Success,” *Techniques*, February, 2006: 13.

<sup>12</sup> C. Deanna Lewis, “Home Building: It’s Hot!” *Techniques*, February 2006: 16.

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